

Infrastructure Issues and Plans

- Five-Year View of Infrastructure

- *Planning*

- EM cleanup program ending; transitioning to LTRA
 - Reactor D&D expected FY 06 – 08; BMRR remains SC
 - Adaptive reuse of NSLS space after NSLS-II
 - Recapitalization of permanent buildings

- *Construction*

- SLI, Alt Financing, GPP, NY State
 - Research Support Building, Housing Renewal
 - Central Chilled Water capacity expansion
 - Utility distribution system lines and components

Infrastructure Issues and Plans

■ Five-Year View of Infrastructure (cont'd)

■ *Maintenance (Lab operating)*

- Will reach 2% MII in FY 06 (tracking to 1.7% goal in FY 05)
- New maintenance management system on line (Maximo) – improved efficiency in staff utilization; increased PM accomplishment
- ESS&H, roofing, rehab laboratory spaces

■ *Utility Supply*

- Electric power
 - NYPA 7/05 – 6/08 at \$65/MWH; about \$9M/yr below local industrial tariff rate
 - Rates beyond this agreement will be our next focus
- Oil/natural gas
 - Rise in international crude oil prices will drive gas prices and local electric rates (L.I. generation 100% fossil)
 - Availability of interstate gas directly to BNL delayed; affects cogeneration economics

Infrastructure Challenges & Strategies

Challenges	Strategies
Rehab of (permanent) Science Buildings/Laboratory spaces	<ul style="list-style-type: none">▪ SLI, GPP, and maintenance projects (MII@2%)▪ NY State Participation
Electric Power Rates beyond July 2008	<ul style="list-style-type: none">▪ Continuing dialog with NYPA, LIPA, ESDC (and IPPs as applicable)▪ Evaluate Cogeneration: follow interstate gas availability
Reduce operating costs	<ul style="list-style-type: none">▪ Shrink the footprint through space consolidation/demolition

RPV – DOE REVIEW

- In FY04 OCEM and LMI Associates reviewed BNL RPV's – favorable result
- BNL Methodology
 - Used both MEANS DOE Models and MEANS FIMS Models
 - Used over 2,000 adjustments for cranes, elevators, fire protection, etc.
 - All results in database with MEANS reference numbers
 - Straightforward conversion to Costworks
 - Used CPV Methodology for buildings not matching models and for OSF
 - ENR Building Construction Index for buildings
 - ENR Construction Index for OSF